

ABSTRACT

ELECTROCHEMICAL SENSOR WITH INCREASED REPRODUCIBILITY

The invention concerns a sensor allowing the concentration of a constituent to be determined and being formed by a tongue of small dimensions including a thin plastic substrate (1) supporting at least two current conducting strips (4, 5) separated by a narrow insulating strip (3) of the substrate (1), said substrate (1) and said strips (4, 5) being covered with a plastic covering (2) into which are cut, at one end an opening (8) allowing portions of strip (4, 5) to appear for connection to an electronic apparatus and at the other end two windows (9a, 9b) separated by a strip (11) of the covering (2), said windows (9a, 9b) delimiting on the strips (4, 5) the useful surfaces of a reference electrode beneath a first window (9b) and a measuring electrode beneath a second window (9a) covered with a specific reactant. It is characterised in that at least the measuring window (9a) has an oblong contour in the direction of the tongue.

Application to a glucose sensor in which the specific reactant contains at least glucose oxidase (GOD) and a mediator.

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Figure 1